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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/624,337	07/24/2000	Hiroshi Ikeda	1341,1954 (JDH)	6307

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EXAMINER

KIANERSI, MITRA

ART UNIT	PAPER NUMBER
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2143

DATE MAILED: 12/11/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/624,337

Applicant(s)

IKEDA, HIROSHI

Examiner

mitra kianersi

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 03 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 24 July 2000.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-55 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-55 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 24 July 2000 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☒ Certified copies of the priority documents have been received in Application No. 11-310254.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ | 6) <input type="checkbox"/> Other: _____ |

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Claims 1-55 have been examined.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-55 are rejected under 35 U.S.C. 103(a) as being unpatentable over Johnson et al. (US 6,505,254) and further in view of Lin et al. (Lin 2001/0052015)

1. As per claim 1, Johnson et al. discloses a system comprising:
 - a plurality of data servers connected to a network using an Internet protocol and have various information, (network servers on the internet (col 10, lines 25-26) and post information about updating (information is efficiently distributed through the network. col 10, lines 25-26) of the various information to agents which are substitute for user terminals connected to the network via said network;(server requests are originated by client computers, col 1, lines 17-18, clients) at least one agent connected to said network, wherein said agent accepts the information about updating of the various information posted by said data servers, wherein when the information about updating is an information about updating requested by registered user terminals said agent posts the information about updating to said registered user terminals via said network; (providing the stored information, col 13, lines 41-44)

Johnson et al. do not explicitly teach a plurality of user terminals connected to said network, wherein said user terminals accept the post of the information about updating from said registered agents, and access data servers which have

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posted the information about updating via said network so as to obtain contents of the updated information.

However, Lin et al. in paragraph [0004], teach a method for when many clients want to receive information, they all have to gain access to the site, open up separate TCP/IP connections to the server and retrieve information packets. When those packets relate to the same information that is requested by many clients, duplicate packets are pulled through the network.

Therefore, it would have been obvious to one of ordinary skill in the art at the time of applicant's invention to use the push-pull service disclosed by Lin et al. with the routing request method of Johnson et al in order to improve efficiency of information distribution that results in reduced traffic through the network.

2. As per claim 2, wherein agent is composed of a plurality of agents in a subnetwork (immediately connected subnetworks, col 4, lines 20-25, Johnson) connected to said network, and said user terminals register themselves into the plurality of agents, and said agent executes a representative process for said registered user terminals. (corresponds to the coverage zones which are sets of IP addresses associated with the router independent of where the router is located in the routing hierarchy at a particular point in time. The process of making routing decisions is based on the coverage zone information. (col 4, lines 17-19, Johnson)

3. As per claim 3, wherein a representative agent is provided between said network and said subnetwork, and said representative agent executes a transit process between said data servers and said agent in said subnetwork and between said user terminals and said agent in said subnetwork. (col 4, lines 1-3, Johnson) and (col 5, lines 1-2, Johnson)

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4. As per claim 4, wherein agent is locally connected to at least one provider, said provider being connected to said network, said user terminals being connected to said provider, wherein said data servers post the information about updating or the contents of the updated information to said agent via said provider, and said agent posts the information about updating or the contents of the updated information to said user terminals via said providers. (col 13, lines 61-65 and col 14, lines 1-5, Johnson)

5. As per claim 5, wherein provider is composed of a plurality of providers having a hierarchical relationship, (col 13, lines 55-58, Johnson) said user terminals and said agent having high-hierarchical agents register the information about said user terminals and requested various information into said agent connected to right above provider, said agent having the highest-hierarchical agents and low-hierarchical agent post the information about updating or the contents of the updated information posted from said data servers to agents which lower hierarchically connect user terminals which have made the request. (col 13, lines 40-45, Johnson)

6. As per claim 6, wherein agent posts the information about updating or the contents of the updated information to said registered user terminals via a network, which is different from said network. (For example, a certain router may be an appliance that subscribes to multiple providers of content such as video data. Each provider has its own corresponding routing hierarchy, and the appliance resides at a different location in each hierarchy. Col 13, lines 58-65, Johnson)

7. As per claim 7, wherein agent have a list table of data servers that provide the various information, and when said agent accepts the post that the various information is provided from a data server which is not

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registered in the list table said agent executes a process for additionally registering said data server into the list table. (These routers maintain a routing table in which the fact that the new router is the primary router behind the firewall is recorded. Col 12, lines 50-52, Johnson)

8. As per claim 8, wherein said agent further has data type management information for managing the various information per data type, and when said agent accepts the post that management contents of the various information which are managed by said data servers from said data servers that provide the various information said agent adds or deletes said data servers from the data type management information based on the posted management contents. (Page 4, col.2, part 14, Lin)

9. As per claim 9, wherein when said agent receives the post of the information about adding or deleting the data types of the various information managed by said data servers from said data servers that provide the various information, said agent adds or deletes said data servers relating to the data types to be added or deleted to/from said data servers in the data type management information. (Page 4, col.2, part 14, Lin)

10. As per claim 10, wherein when the data types in management are changed, said agent posts the change of the data types to said user terminals. (The association of a client to a cache server can be changed (e.g., by simply modifying the appropriate entry in the client's DNS, [0020], Lin).

11. As per claim 11, wherein when said agent manages the data types in a hierarchical relationship, and when the data type is changed said agent posts the change of the data types to said user terminals where a

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low-hierarchical data type of the changed data types is registered. (the root attempts to find a router as low as possible in the hierarchy that matches the address in its regular coverage zone and redirects the browser to the appropriate router (step 106 and col 5, lines 21-24, Johnson).

12. Claims 12-22 and 23-33, recite similar limitations as claim 1-12. They are analyzed and rejected by the same rationale.

13. As per claim 34, a push service processing method, comprising:

- the registration step of registering information about user terminals connected to a network using an Internet protocol and various information (col 10, lines 25-26, Johnson) which is requested to be posted by the user terminals into agents which are connected to the network and are substitute for the user terminals; (server requests are originated by client computers (col 1, lines 17-18, clients, Johnson))

- the first post step that a plurality of data servers which are connected to the network and have various information post information about updating of the various information to the agents via the network; (providing the stored information, col 13, lines 41-44, Johnson)

- the second post step that when the agents receive the information about updating posted by the plurality of data servers and the information about updating is information about updating requested by registered user terminals, the agents post the information about updating to the registered user terminals via the network; and the obtaining step that the user terminals receive the post of the information about updating from the agents, and access to the data servers which have posted the information about updating at the first post step via the network so as to obtain contents of updated information.([0004], Lin)

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14. As per claim 35, wherein at the second post step the agents post the information about updating or the contents of the updated information to the user terminals via another network. (For example, a certain router may be an appliance that subscribes to multiple providers of content such as video data. Each provider has its own corresponding routing hierarchy, and the appliance resides at a different location in each hierarchy. Col 13, lines 58- 65, Johnson)

15. As per claim 36, wherein further comprising the first -processing step that when the not less than one agents accept the post that the various information is provided from a data server which is not registered into a list table for managing a list of the data servers for providing the various information, the agents additionally register said data server into the list table. (These routers maintain a routing table in which the fact that the new router is the primary router behind the firewall is recorded. Col 12, lines 50-52, Johnson)

16. As per claim 37, wherein further comprising the second processing step that when the not less than one agents accept the post: of management contents of the various information managed by data servers for providing the various information from said data servers, the agents add or delete the data servers in the data type management information for managing the various information per data type based on the posted management contents. (Page 4, col 2, part 14, Lin)

17. As per claim 38, wherein further comprising the third processing step that when the not less than one agents accept the information about adding or deleting the data types of the various information managed by data servers for providing the various information from said data servers, the agents add or delete data servers relating to the data types to be

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added or deleted to/from the data servers in the data type management information managing the various information per data type. (Page 4, col 2, part 14, Lin)

18. As per claim 39, wherein further comprising the third post step that when the data types in management are changed, the not less than one agents post the change of the data types to the user terminals. (The association of a client to a cache server can be changed (e.g., by simply modifying the appropriate entry in the client's DNS, [0020], Lin).

19. As per claim 40 further comprising the fourth post step that when the data types are managed in a hierarchical relationship and the data types are changed, the not less than one agents post the change of the data types to user terminals which register a low-hierarchical data type of the changed data types. (step 106 and col 5, lines 21-24, Johnson).

20. Claims 41-47 and 48-54, recite similar limitations as claim 34-40. They are analyzed and rejected by the same rationale.

21. Claim 55, recites similar limitations as claim 40. It is analyzed and rejected by the same rationale.

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Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mitra Kianersi whose telephone number is (703) 305-4650. The examiner can normally be reached on 7:00AM-4:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Wiley can be reached on (703) 308-5221. The fax phone number for the organization where this application or proceeding is assigned is (703) 746-9923.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-3900.

Mitra Kianersi
Dec/08/2003


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